AMERICAN OBSERVER

News and Issues—With Pros and Cons

VOLUME 27, NUMBER 44 WASHINGTON, D. C. AUGUST 4, 1958

World Struggles To End Sickness

United Nations Makes Gain Against Disease—a Step In Building Peace

AS you read this, hundreds of doctors, nurses, sanitary engineers, and other health experts from many lands are fighting a war. To find the enemy, they are wading in swamps and cutting their way through jungles, riding camels and jeeps across deserts and mountains, and flying by helicopters to remote villages. The enemy they are stalking is called *disease*.

For the past 10 years this worldwide struggle against illness has been directed by the World Health Organization (WHO), an agency of the United Nations. WHO was set up because the UN's founders felt that peace and freedom—the UN's goals—depend on more than just preventing war—important as is the goal of avoiding conflict just now. Peace also depends on people.

"How can there be real peace," they asked themselves, "in a world where millions of people die or are crippled by diseases that can be cured?" They were thinking of the fact that more than half the world's children don't have a fair chance to become healthy, happy adults; that two-thirds of the world's people are sick and hungry; that in the world as a whole there is only 1 doctor to care for every 2,185 people.

These figures mean illnesses and death in many lands. They mean that countries remain backward because many of their people die before they reach their productive years.

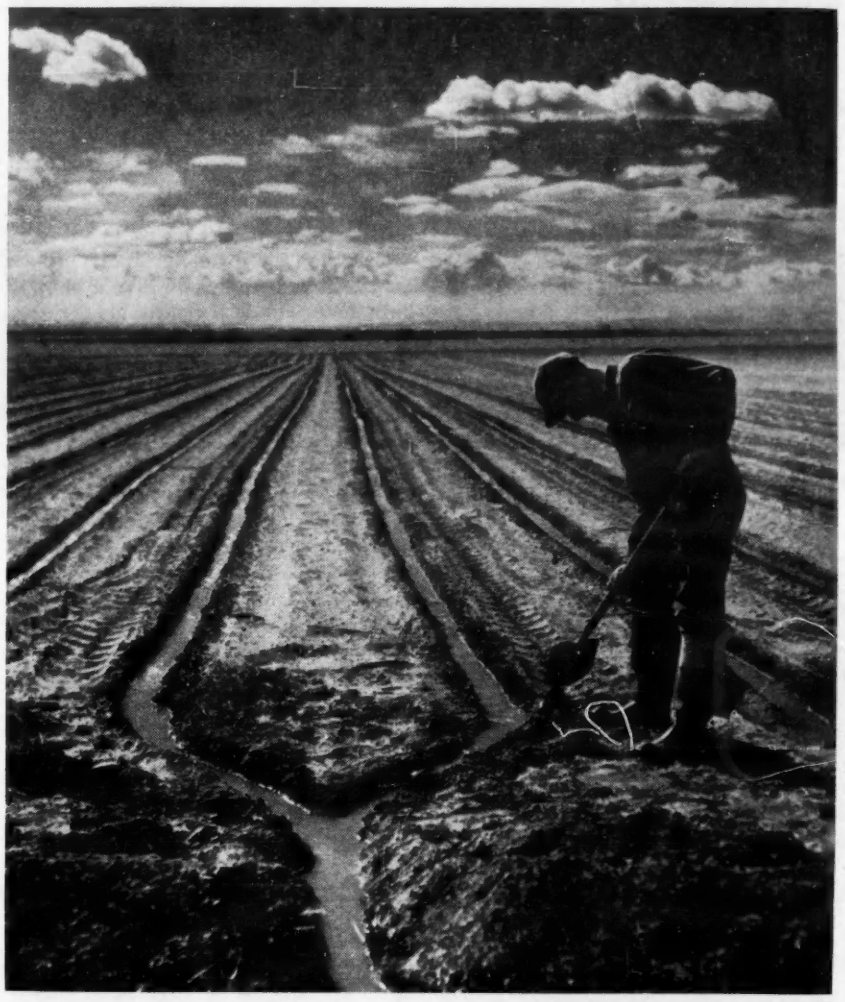
Hope for Health. Overcoming these health problems requires tremendous amounts of work and money. But WHO's medical experts are not discouraged. They are hopeful because they know that in the past nations have solved similar problems.

For instance, in Europe a century ago people were poor, hungry, and worked beyond their strength. Diseases, born in the filth and garbage of villages and homes, often became widespread. Doctors did not have good medicines or equipment. These conditions shortened life, and the average European lived only 40 years.

Today, however, Europeans can expect to reach 70 years, because their lives are easier and their health is better protected. Few people are hungry. Machines do more of the heavier and dangerous work. Garbage is collected, and water supplies are safe. Well-trained doctors and hospitals prevent and cure diseases.

Because of such examples, WHO believes progress also can be made in the backward countries of Africa, Asia, and South America. They think the battle for good health can be won

(Continued on page 2)



WATER-HUNGRY LAND. In many parts of our nation crops are grown on land watered by irrigation works. Irrigation uses about one-third of our water.

On Water Conservation

It Is More than Just Something to Drink for Your Thirst. It Is Vital to Life, to Crops, and to Industry.

A LARGE advertisement in a newspaper attracted attention with a beautiful photograph. It was of an outdoor scene with snow-capped mountains, evergreen forests, and a stream of white, churning water.

At first glance, one would have guessed the ad was placed to attract tourists. Upon taking a closer look, though, the reader discovered a different purpose. The ad was an invitation to industries rather than to travelers. "There is plenty of water in our part of the country—enough for all your needs," the advertisement told businessmen.

This reminds us that water is the most widely used material in factories. A company looking for a good place to build a new plant must first inquire about water supplies.

Water is needed to cool hot metals, make steam, wash away waste materials, and run through air conditioners. The water required in our nation's factories weighs 50 times as much as all other manufacturing raw materials together.

A big paper mill uses more water each day than a good-sized city. It takes 1,250 pounds of water, for example, to make the pages on which your big Sunday newspaper is printed.

More than 65,000 gallons of water cool each new ton of steel. Over 1,000,000 gallons of water are needed to make 1,000 barrels of aviation gasoline. To turn out a ton of man-made rubber, a plant must use 600,000 gallons of water.

It is no wonder that a state with plentiful water supplies can attract new industries. Water is one of our most important resources.

Unfortunately, not all states can boast about their supply of water. The nation, as a whole, faces a serious water problem. Many areas lack the flowing liquid for both factories and farms.

In the past year, over 1,000 cities have had to cut down on their use of water at one time or another. Many big cities now depend on water brought to them from long distances. Severe droughts often plague farmers.

At first glance, it is hard to understand why we are short of water. We are getting the same amount of rain —about 30 inches a year—as we always have. Enough rain falls every 12 months to fill a lake the size of California with 50 feet of water.

(Continued on page 6)

Leaders Tackle Mideast Question

Future U. S. Policy in Sorely Troubled Area Is Now Under Discussion

CAN summit talks bring peace to the Middle East? What long-range policy should the United States follow in that part of the world?

It may be some time before the answers to these questions are known. As these words are written, it is too early to judge results of current attempts to solve the Mideast problem.

Offering some encouragement in the troubled situation was the slackening in late July of what had seemed earlier to be a headlong rush toward war. Much credit for the reduced tension was given to Secretary General Dag Hammarskjold of the United Nations, who used his powers quietly but effectively in the interests of world peace.

Robert Murphy, U. S. Deputy Under Secretary of State, was also praised for his able work. Murphy was rushed to Lebanon where he conferred with both rebel and government leaders in an effort to restore order there.

The calmer atmosphere—U. S. leaders feel—should help greatly in solving the immediate crisis. Even if war is averted, though, the problem remains of what the long-range policy of the United States in the Middle East should be.

Some feel that military alliances with Middle Eastern lands are not enough. For example, *The Washington Post* recently commented as follows: "Real stability may well lie with independent neutrals rather than with shaky allies. There is no reason whatever to yield to the aggressive manifestations of Nasserism or to abandon our commitments; but there is every reason . . . to seek ways of channelizing (Arab) nationalism along moderate lines. . . .

"That means heeding the counsel of authentic nationalists in such countries as Tunisia and the Sudan; it means, also, using the tools of imaginative and political economic policy in anticipating new eruptions. Above all, it means recognition of the inevitability of change. If we are to have any influence in minimizing violent change in the Near East, then we must be prepared to assert ourselves in bringing about constructive change."

Others disagree with the view that we should stake our future interests in the Middle East on "independent neutrals." They feel that we should cement strong ties with nations that will stick with us. Otherwise, the United Arab Republic, supported by Russia, will—they contend—get control of the entire region including Kuwait, Bahrein, and other oil-rich areas around the Persian Gulf.

WHO

MANY DISEASES are best treated by eliminating their carriers. Here a trap for disease-carrying snails is lifted from a canal in the Philippines.

UPI

WITH THE AID of WHO backward nations are expanding their health facilities. More than 1,400 mother-and-child health centers are open in Indonesia.

WHO

THE UN SENDS experts to remote lands to aid in the fight against disease. Here an official discusses their health problems with natives of Kenya.

World Wages War Against Illness

(Continued from page 1)

because it is being waged on an international scale by the 88 nations cooperating with WHO. Furthermore, medical experts now have new drugs, vaccines, and medical equipment which make the struggle easier.

Health Problems. However, the fight for good health is a long one, because good health involves so many things. For instance, people first must be taught what causes disease and how cleanliness prevents many illnesses. Such education is difficult among backward people who cling to strange health superstitions.

In Asia, for example, many people believe it is bad luck to give a baby a bath before it is 2 weeks old. Some believe a baby will be killed in a fall if its fingernails aren't cut and placed on the window sill.

Good health also depends on proper food and clean, healthful homes. But people in many parts of the world do not have enough money to buy such food and houses. To insure good health, cities and villages should be kept clean. This is difficult, however, where there are no plumbing or sewage systems or water is scarce.

These are a few of the world's many health problems. Now let's look at some of the major diseases which occur in the backward areas of the world. Let's see what progress is being made with the help of WHO—and other UN agencies that also are concerned with improving the well-being of people everywhere.

Backward Areas. Malaria is one of the diseases that has haunted the world for centuries. Before 1948 there were 300,000,000 cases of malaria in the world, causing 3,000,000 deaths each year. In 1897 it was discovered that mosquitoes carry the disease. Since then, man has waged war against this insect.

In recent years WHO teams have used DDT spray to kill mosquitoes. As a result, the number of malaria cases and deaths were reduced by 30 per cent in the past 10 years. In eastern Mediterranean countries, where malaria once flourished, the number of people suffering attacks has been reduced by about a third.

Millions of acres of land, formerly infested by mosquitoes, now are safe to use for growing food. In India, for instance, jungle swamps were drained so mosquitoes cannot breed there. Furthermore, millions of people now are well enough to work the land. Formerly they had to go hungry because they were so ill with malaria that they couldn't harvest their food crops.

Last year WHO started a world-wide campaign to erase malaria. The 5-year program is expected to cost more than $500,000,000. The United States is playing a big part in the campaign and has set aside about $23,000,000 to carry on anti-malaria work in 1958. In January, President Eisenhower in his State of the Union message invited the Soviet Union also to take part in the world-wide program. So far Russia has not given any help.

Yaws, a major disease found in tropical countries such as Indonesia, leaves victims crippled and disfigured. More than 20,000,000 people have been treated for yaws since 1948, but there still are more than 30,000,000 cases in the world. WHO workers cure many cases of yaws with a single injection of pencillin, which heals the sores in about two weeks.

There are about 8,000,000 cases of leprosy, a disease often mentioned in the Bible. In Burma today there are 10 cases of leprosy per 1,000 people. Workers from WHO use new sulfa drugs to treat victims.

Tuberculosis takes 5,000,000 lives each year, many of them in India. A vaccine called BCG has been given 74,000,000 people since 1948, and another 192,000,000 have been tested for tuberculosis. Most of those treated were children.

Other diseases in backward areas include cholera, which kills in hours. It is most serious in India and Pakistan. About 120,000 cases of smallpox were recorded by WHO last year, seven-tenths of them in Asia. Yellow fever, a disease of the tropics, was reduced by half from 1950 to 1955.

Other WHO Projects. In 1957, WHO medical teams gave milk and other foods to about 4,700,000 children. This is important because in countries such as Ceylon, Burma, and India the average person gets only about two-thirds as much food as he needs.

A valuable WHO project is to set up clinics for mothers and children. About 11,000 clinics are aided by the UN, and as a result many more babies live to reach their first birthday. In Ceylon, for example, 192 out of every 1,000 babies born in 1920 died in their first year. In 1955 only about 71 out of every 1,000 died.

WHO teams also work to improve water supplies, especially in India where three-fourths of the people drink unsafe water. About 2,000,000 of the 50,000,000 Asian Indians who get sick each year from water-carried diseases die.

Developed Areas. Many of the diseases found in backward areas no longer are serious in modern nations. For instance, cholera, plague, smallpox, and yellow fever are almost forgotten. Measles, diphtheria, scarlet fever, and whooping cough rarely kill. Malaria has almost been removed, tuberculosis is gradually disappearing, and polio is on the way out since the discovery of the Salk vaccine.

However, modern nations do have health problems. For example, because people are living longer in these lands, doctors are especially concerned with the diseases of the aged. They also are concerned with illnesses caused by the strain of modern life. Today one of the major problems in modern countries is that of finding the clues to diseases that presently are incurable.

Arteriosclerosis, or hardening of the arteries, is the most frequent cause of death in North America and Europe. This ailment causes many of the heart diseases which account for about half the deaths in our country. Cancer causes about a sixth of all American deaths and also is a big problem in other modern countries. WHO collects and publishes the research of scientists who are trying to find cures for these diseases.

Pneumonia and influenza rank among the top 10 killing diseases in developed countries. They are leading causes of death among infants. Death rates, however, are dropping because of drugs such as penicillin. With the new drugs an American doctor now

has to spend a total of only about 1½ hours treating a pneumonia case. Formerly he spent 11 hours.

When the influenza epidemic swept the world in 1918, about 20,000,000 people died. However, when the Asian flu epidemic broke out last year, health authorities were ahead of it. They knew about when it would strike certain countries because WHO teams had collected and distributed information about the expected epidemic. Vaccines, developed ahead of time, were used to check the epidemic.

Mental illnesses are becoming more of a problem in countries where the stresses of modern life are great. It is reported that about half the hospital beds in Europe and North America are occupied by mentally ill patients. WHO assists countries in setting up mental health services.

It is believed that the next 10 years of research will solve the mystery of what causes schizophrenia, one of the most serious mental illnesses. The next decade also promises a cure for certain types of cancers and a way to prevent hardening of the arteries. Such medical research also is tremendously important from an economic viewpoint. In our country, for instance, it is estimated that the annual cost of premature deaths, partial or total disability, and short illnesses is about 38 billion dollars.

Doctors. In both modern and backward areas of the world, training doctors is a problem. It is estimated that there are 1,236,000 physicians for the world's 2,700,000,000 people, or one for every 2,185 people. Israel has the most doctors—one for every 467 people. The U. S. average is one for every 750. In Sudan, however, there is only one doctor for every 81,000 people, in Indonesia one for 71,000.

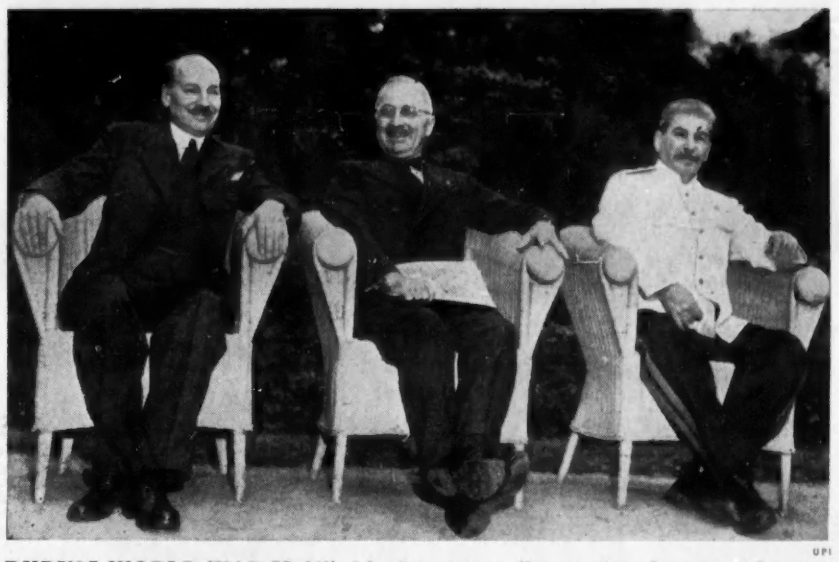
WHO is, therefore, helping countries set up schools to train more doctors as well as nurses.

Medico. WHO is not the only organization trying to help people achieve better health. A new worldwide medical program, called Medical International Cooperation (Medico), was organized recently. Its aim is to aid Asians and Africans on a people-to-people basis.

Teams of doctors and assistants will go to those areas to train staffs and build clinics and hospitals. After about two years of training, the local people will take over the clinics and hospitals. Medico is supported by U. S. drug industries and private contributions. —*By* ANITA DASBACH

WHO

OLD AND NEW. An Iranian woman, dressed in her native costume, carries the modern sprays she uses to help WHO teams working in Iran.



UPI

DURING WORLD WAR II Allied leaders met to discuss plans for war and peace. Above, British Prime Minister Clement Attlee, President Harry Truman, and Soviet Marshal Josef Stalin are shown at a 1945 conference in Potsdam, Germany.

Historical Background

Past Summit Conferences with the Russians

THE recent exchange of notes between President Eisenhower and Soviet Premier Nikita Khrushchev over a summit meeting has focused attention on past conferences of a similar nature. Several top-level meetings between leaders of Russia and the chief western powers have taken place over the last 15 years.

The last big summit meeting between western and Soviet leaders occurred in the summer of 1955 at Geneva, Switzerland. That meeting was attended by President Eisenhower; Britain's then Prime Minister Anthony Eden; France's 1955 Premier, Edgar Faure; and Russia's then Premier Nikolai Bulganin. Nikita Khrushchev, who is now Soviet Premier, also attended the meeting.

Though the 1955 Geneva parley was conducted in a friendly way, very little came of it. That's one reason why Uncle Sam has wanted a good deal of spade work done before another top-level conference.

The Geneva parley was the first summit meeting with the Soviets since 1945. Here is a summary of the past meetings between the 2 sides:

Tehran. Our World War II President Franklin Roosevelt, British Prime Minister Winston Churchill, and Soviet Premier Joseph Stalin met at Tehran, capital of Iran, in November 1943. All 3 were accompanied by top military advisers.

The chief aim of the meeting was to draw up plans for victory over nazi Germany. It was agreed that British and American troops would open a second front against Germany, while Russia continued to hammer at nazi forces in the east. The 3 leaders also decided "to make a peace which will command the good will of the overwhelming mass of the people of the world and banish the scourge and terror of war for many generations."

Yalta. Roosevelt, Churchill, and Stalin met for the second and last time in February 1945 at Yalta, a Russian resort city on the Crimean Peninsula in the Black Sea. On that occasion, the Big Three planned the final phase of the war against Japan, laid the foundation for the United Nations, and agreed on important territorial changes.

In Europe it was agreed to break up Germany into occupation zones, to punish war criminals, and to arrange for the payment of German reparations. The boundaries of postwar Poland were fixed to take in a part of the land held by Germany just before the war. It was agreed to hold free elections in Poland and other lands that Germany had taken over before and during World War II.

A part of the Yalta agreement that was kept secret till the following year had to do with Asia. Russia decided to enter the war against Japan and was granted certain concessions. For example, it was agreed that Outer Mongolia—once under Chinese rule—would remain tied to Soviet Russia. Also, Moscow was to receive the Kurile Islands and certain other areas in the Pacific, a few of which had been taken from Russia by Japan some years earlier.

Potsdam. The final wartime meeting of the Big Three took place at Potsdam, a suburb of Berlin, in July and August of 1945. There were new faces at the conference table. For the United States there was President Truman, who had become Chief Executive 3 months earlier upon the death of Franklin Roosevelt. Midway through the meeting, Clement Attlee took over Churchill's place—after Attlee's Labor Party won victory in British elections. Of the original Big Three, only Stalin remained.

Truman and Churchill, early in the conference, asked for unconditional surrender of Japan and outlined certain peace terms. At the end of the meeting, Truman, Attlee, and Stalin issued a statement outlining Germany's future. In general, it spelled out the provisions of the Yalta agreement in more detail. It was agreed that the United States, Britain, France, and Russia each would occupy a part of Germany until nazi power had been smashed. Then Germany would be united (it hasn't been) under its own *free* government.

Critics of these various conference agreements contend that they were too favorable to Russia. Supporters reply that they would have turned out well if the Russian leaders had lived up to their promises. —*By* ANTON BERLE

Marian Anderson, well-known singer, has been named as 1 of the 7 new members of the United States delegation to the fall session of the United Nations General Assembly.

News Quiz

World Health

1. Good health involves many things. What does it involve for a backward area of the world, in contrast to a developed area?

2. Give some examples and statistics concerning the world's need for more trained doctors.

3. Why are WHO officials optimistic about the world-wide struggle for good health?

4. What progress has been made in fighting yaws, leprosy, tuberculosis, cholera, and smallpox?

5. List some of the health problems of modern nations.

6. Why is malaria one of the world's most serious diseases, and what is being done to combat it?

7. What is Medico and what does it hope to accomplish?

8. In addition to administering inoculations against diseases, what other health projects are being carried out by WHO?

Discussion

1. Discuss thoroughly the reasons which led to founding of the World Health Organization. Do you think the reasons were valid? Give examples from history and current situations to support your opinion.

2. What, in your opinion, has caused the high rate of mental illness in modern nations? Discuss the ramifications of this problem and what WHO is doing to improve the situation.

Water Resources

1. What is the average U. S. rainfall? Which is the wettest and which is the driest state?

2. Describe briefly the water cycle.

3. Give examples to show why large water supplies are necessary in the operation of American industries.

4. How much more water is being used today than was used in 1900? Give some examples of the increased use of water.

Discussion

1. Give examples, from your personal experience and reading, of water pollution in urban and rural areas. Discuss the steps being taken to correct the situation.

2. Discuss the role science is playing in trying to increase America's water supplies.

Miscellaneous

1. Why are West German courts presently trying people who committed crimes during the nazi era?

2. Discuss briefly how the United States stands in relation to its supply and need of iron ore, oil, coal, natural gas, manganese, and uranium.

3. How many Americans change their residence annually?

4. Give examples which show that the United States consumes large amounts of mineral resources each year.

5. How many foreign agriculturalists have studied in the United States during the past 10 years?

6. What was the significance of the Army's announcement that it had recovered the nose-cone from its Jupiter missile?

7. List some of the measures suggested by scientists for conserving our mineral resources.

8. For what purpose is the National Cowboy Hall of Fame and Museum being built?

9. Tell something about the proposed changes for governing France's overseas territories.

10. What is the chief reason for India's "currency crisis," and how do Indian officials hope to meet this problem?

11. How has Congress reacted to President Eisenhower's request for an extension of the Reciprocal Trade Relations Act?

12. Name the two women who have served as Cabinet members.

13. With polio virtually conquered in this country, what will money collected in the "March of Dimes" be used for?

The Story of the Week

As Summer Ends

In accordance with our usual custom, we are suspending publication of AMERICAN OBSERVER for the remainder of August. The next issue will appear under date of September 8.

New Official

Women interested in careers in public service have a new inspiration now. President Eisenhower's appointment of Miss Bertha Adkins as Under Secretary of the Department of Health, Education, and Welfare marks a milestone for women in Federal service. She is the first woman to serve as Under Secretary in a Federal Department.

Miss Adkins has been well known in national politics for some years. Since 1953 she has served as assistant chairman of the Republican National Committee, organizing women's activities for the party. Before turning to politics, Miss Adkins was a teacher and college dean.

Incidentally, only 2 women in history have reached full cabinet rank in the Federal government. Miss Frances Perkins served as Secretary of Labor under President Franklin Roosevelt. Mrs. Oveta Culp Hobby was Secretary of Health, Education, and Welfare earlier in President Eisenhower's administration.

French Territories

If present plans are followed, citizens of France's overseas territories will have an opportunity to decide the type of ties which will link their lands to France in the future. Proposals for changes in the status of the French territories are included in a new French Constitution. Voters in France and its territories will approve or reject the Constitution in a referendum to be held in the fall.

If the proposed Constitution is approved, the overseas territories will then select 1 of 3 possible paths for the future. They are:

Continuation as territories within the French Republic. Under this choice a territory would continue to exercise some local self-government, be governed by local laws, and would send representatives to the French national parliament. Or:

Full integration with France. This would transform a territory into a department of France itself. The department would be governed from Paris just as are the departments of continental France. Or:

Association in a system of federated territories. Under this choice each territory would handle its own affairs except in certain areas, such as national defense and foreign relations.

Most of France's overseas territories are located in the big regions of French West Africa and French Equatorial Africa, but Madagascar and other islands also are included. These territories now operate under laws which permit them limited self-government.

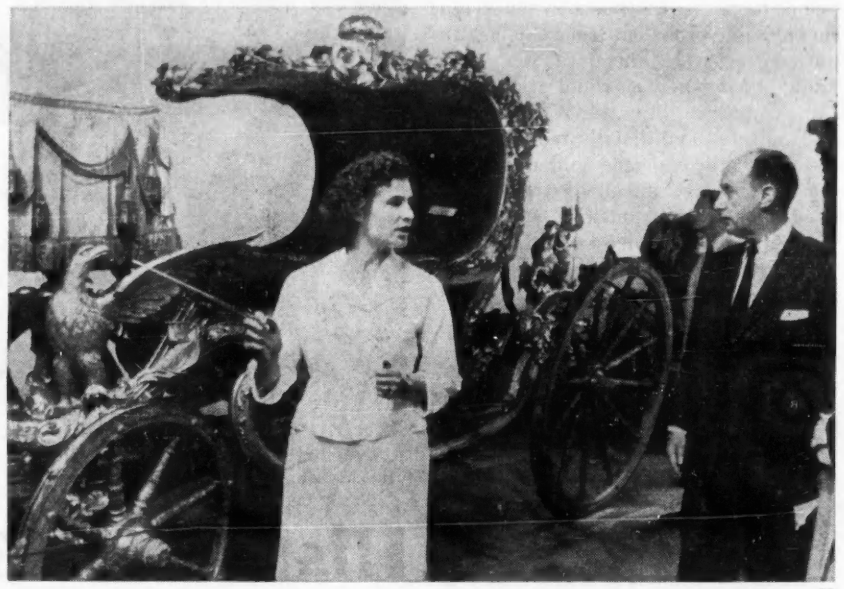
African leaders in the territories have demanded that a fourth choice—full independence—also be submitted. The Constitution is not expected to include this option at present.

Reciprocal Trade

Congress has approved an extension of the Reciprocal Trade Agreements Act, continuing the President's authority to negotiate mutual tariff cuts with other nations.

UPI

BABY BUSES. Hamburg, Germany, uses these small buses, which carry 18 passengers, for short runs from the outskirts of the city to downtown areas.



UPI

FAMOUS VISITOR. Adlai Stevenson, twice a candidate for the Presidency of the United States, visits a museum during his recent tour of the Soviet Union.

Last January, President Eisenhower asked Congress for a 5-year extension of the act, which expired June 30, and authority to cut tariffs on foreign products by as much as 25 per cent during this period. In June, the House of Representatives passed a bill granting the President's request, but serious opposition developed in the Senate.

The Senate Finance Committee reported a trade bill which called for a 3-year extension, instead of a 5-year one, and which limited tariff cuts to 15 per cent. This bill also contained an amendment which the Administration said would cripple the program.

This proviso would have given the U. S. Tariff Commission greater power to force a tariff "hike" if that body thought a particular American industry was being seriously hurt by foreign competition. The President's authority to overrule a Tariff Commission recommendation would have been subject in each case to approval by a majority vote of both houses of Congress.

This amendment was defeated in the Senate by a vote of 63 to 27, and the trade bill was then adopted by a 72 to 16 vote.

Differences in Senate and House versions will be ironed out by a conference committee made up of representatives of both houses. As passed, the Senate bill limits tariff cuts to 15 per cent, over a 3-year period. As we go to press, the trade bill's final version has not been completed, but it is expected to be close to what the Administration originally requested.

More Aid to India?

India is again asking the United States and other countries for loans. Officials of the large Asian democracy say they face a severe currency crisis, and are in urgent need of $300,000,000 before the end of 1958. They also say they will require 1.2 billion dollars over the next 3 years.

The crisis has developed, Indian officials say, because the country has been buying more abroad than she has been selling to other lands. Thus, reserves of currency are being used up to pay for imports, which consist largely of machinery for factories. Indian officials say that if they fail to find the needed money they will have only 2 alternatives: stop paying their country's bills, or drastically cut back their 5-year plan.

India's second 5-year plan, now approaching its mid-point, is a development program aimed at increasing national income by about 25 per cent. It would raise the average income of Indians to about $66 per person a year. The program—largely industrial—emphasizes development of India's power and mineral resources.

Earlier this year, the United States agreed to lend India $225,000,000, but our lawmakers are sharply split on the question of added assistance. India's latest request came as Congress was considering final foreign-aid appropriations for the current fiscal year.

Battle of Words

While the world seeks to avoid further trouble in the Middle East, one part of the battle for this important region is growing hotter. It is the war of words being waged to reach the minds of the Arab peoples.

The Voice of America (VOA), the radio arm of the United States Information Agency, has tripled its Arabic broadcasts to the Middle East nations. The time allotted for news reports and other programs presented in Arabic has been increased from 1½ hours a day to 4½ hours.

VOA broadcasts were stepped up in an effort to combat the anti-American propaganda being spread by Radio Cairo and Radio Damascus, the spokesmen for President Nasser of the United Arab Republic. But the VOA is handicapped by the fact that Radio Cairo operates on a more powerful signal and can reach more listeners. VOA broadcasts to the Arab lands originate from transmitters in Morocco, Ceylon, Greece, and aboard a Coast Guard ship.

War Crimes Trials

Slowly, but thoroughly, the courts of West Germany are bringing to trial Germans blamed for war crimes during the nazi era. Some of those charged already have served sentences passed by British, United States, French, and Soviet tribunals. Now, because of pressure from the West German people themselves, some of the criminals are being brought into court to stand trial for other offenses.

There have been several major war crimes trials this year. One trial is being conducted now, another will be heard this fall, and still other cases are being prepared for future trials. West German justice officials say the trials are being held not because the government wishes to even old scores with former nazis, but primarily because the public is demanding that justice be carried out.

America's Minerals

Day by day Americans use vast amounts of valuable mineral resources —both metals and fuels—which are taken from the ground and are not renewable. Experts say if we don't make better use of these resources, we may soon find that our mineral cupboard is bare.

Although the United States has fewer than 7 out of every 100 of the world's people, it uses half of all the iron, copper, lead, and tin consumed by the entire world. We burn three-fifths of the oil produced by the world in a year's time and a fourth of the coal dug by miners. The United States consumes nearly half of all the free world's entire production of important minerals.

To fill our needs, we depend partly on our own resources and partly on foreign countries. We purchase more than a fifth of our iron ore, nine-tenths of our manganese, and a third of our copper, lead, and zinc from other lands. Most of our tin comes from abroad. Within a few years we may purchase from 25 to 100 per cent of all our supplies of 26 important minerals from other lands.

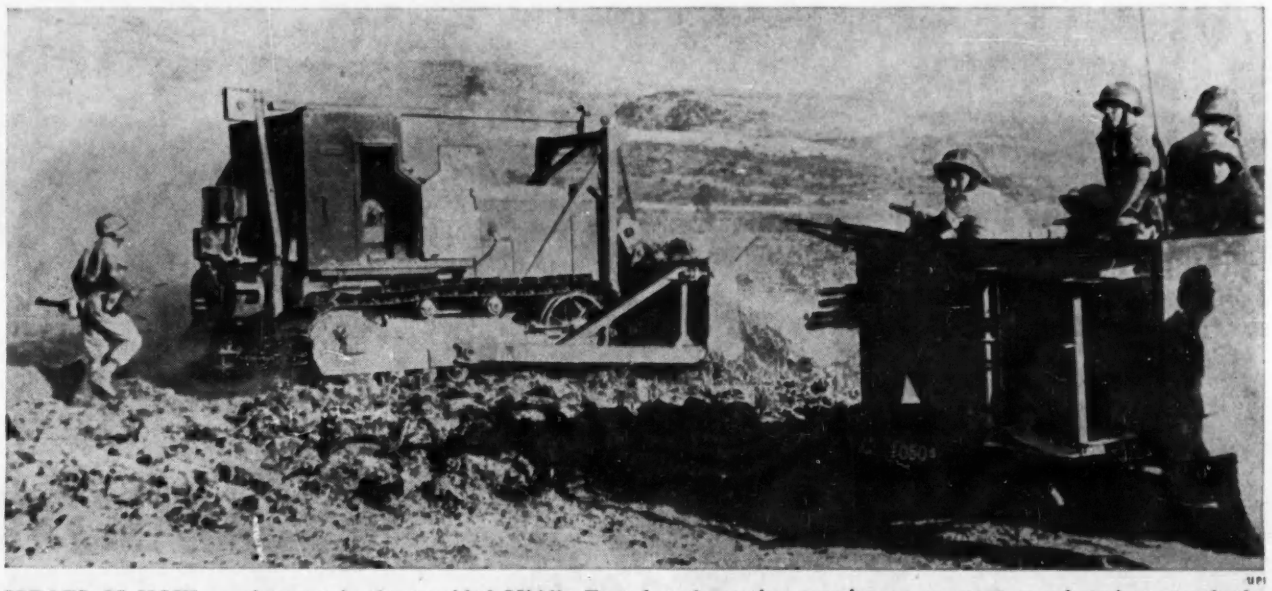
Iron Ore. Last year, U. S. steel mills used 133,000,000 tons of iron ore to turn out 115,000,000 tons of steel. More than a fifth of the ore came from other countries. By 1975, when the United States will require 170,000,000 tons of iron ore annually, nearly two-fifths of the supply will have to come from other lands.

Oil. The United States is the world's largest oil producer, and scientists say we have *proved* reserves of about 30 billion barrels. But we now use oil at the rate of 3 billion barrels or more a year. By 1965, we may consume more than 8 billion barrels annually. New supplies of oil must be found, for as other nations use increasing quantities of oil, we may not find it easy to buy the petroleum we need. Some people think the United States may have *potential* reserves of 300 billion barrels, not yet discovered. Much of this may be in offshore deposits.

Coal and Natural Gas. The United States has nearly half the world's usable coal—perhaps 948 billion tons. Since we now burn about 420,000,000 tons a year, experts think our coal supply will be ample for many years. We also have rich natural gas deposits which may last for a long time.

Other Minerals. In 1956, U. S. steel mills consumed about 2,000,000 tons of manganese. Most of it came from India, Brazil, Ghana, and South America. It is believed that the United States now is the world's leading producer of uranium. We have a 10-year supply in proved reserves, and may have other deposits.

Scientists say there are several ways to make mineral resources last longer. Among their suggestions are the following: (1) stop the waste of minerals and fuels during the mining and pumping process, (2) find new supplies, (3) use low-grade ores, (4) use plastics for articles once made of metals, (5) reclaim scrap metals, and (6) let science continue to develop new materials.



UPI

ISRAEL IS NOW a quiet spot in the troubled Middle East, but the nation remains on constant guard against attacks by her unfriendly Arab neighbors. In some border areas Israeli farmers work under the protection of armed soldiers.

UPI

PEACEFUL DESTRUCTION. This tank, released from army duty, does as much damage now as it once did with its guns. A Harrisburg, Pennsylvania, contractor uses the tank to demolish houses. The machine does the job in 3 minutes.

Missile Progress

The Army has announced a major development in the missile field which makes the "re-entry problem" (see July 28th AMERICAN OBSERVER, page 4) less troublesome. The Army recently fired a Jupiter intermediate range ballistic missile from Cape Canaveral and about 2 hours later recovered the nose-cone from the Atlantic.

The announcement was cheered because it meant that, for the second time in 2 consecutive trials, a nose-cone had re-entered the earth's atmosphere without burning up. The burning up, as happens when meteors fall, is caused by the intense heat generated by air friction.

Solving the re-entry problem is important both to peacetime and wartime use of missiles. From the standpoint of peace, having a nose-cone able to re-enter the earth's atmosphere means that a rocket could be sent to the moon or another planet and could return to its home base. From the viewpoint of defense, it means that the nose-cone could speed an atomic warhead through space and then back into the atmosphere and onto a target.

March of Dimes

The "*March of Dimes*" will continue, the National Foundation for Infantile Paralysis announces, and the money collected will help solve 2 other major health problems, as well as to fight polio. These problems are arthritis, and disorders of the central nervous system due to birth defects.

The National Foundation was started in 1938, by President Franklin D. Roosevelt, and since then has raised $490,000,000. The sum has been mostly used on polio research, on prevention of the disease, and in the care of polio patients. During this 20-year period, polio has been virtually conquered.

Incidence of polio has declined rapidly since the Salk vaccine was put into general use in 1955. In that year, about 29,000 cases were recorded in the United States, whereas only 626 cases were reported in the first 6 months of 1958.

National Foundation officials say they will continue their programs of polio research and patient care, but will expand their activities to help the fight on crippling arthritis, and on birth defects of the central nervous system. Aid will be given to thousands of children suffering from these ailments, but the heart of the program will be research.

This and That

Moving apparently is becoming an established pattern of American life. According to the Census Bureau, during the past 10 years 1 in every 5 Americans annually changed his residence. There has been little change in the percentages from year to year.

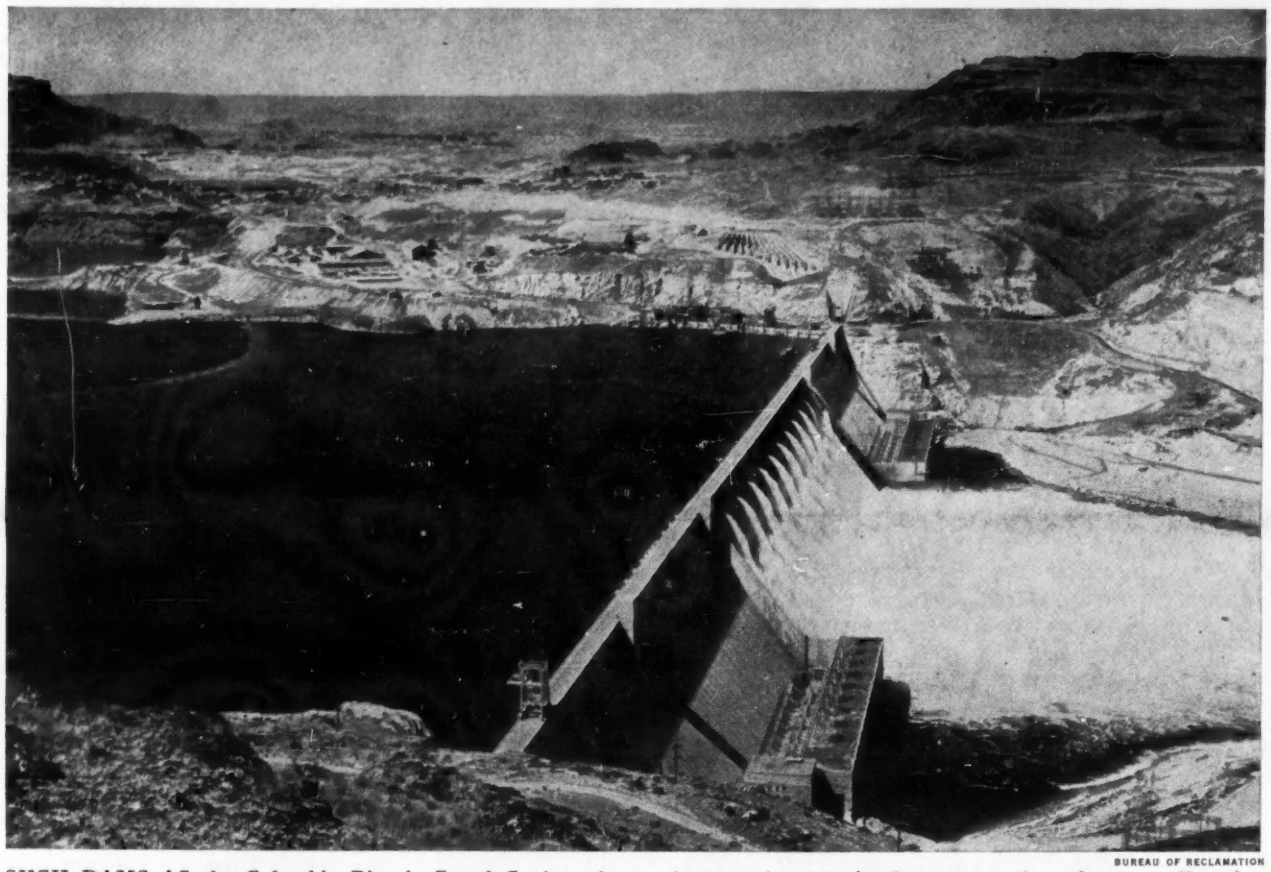
The Bureau says its most recent study shows that the Westerners moved the most, while people in the Northeast moved the least. Most of those moving found new residences in the same county. The report showed that about 10,000,000 moved between states, and that city people moved farther than rural folks.

Cowboys will be honored in the National Cowboy Hall of Fame and Museum, being built on the outskirts of Oklahoma City. Seventeen states will have special sections in the hall for their own heroes. The shrine will honor the cattle industry for its colorful part in developing the American West. Also honored will be notable cowboys, plainsmen, territorial governors, and others who pioneered or carried on western traditions. Already chosen to be honored are Theodore Roosevelt, Will Rogers, and Buffalo Bill Cody.

Paper clips, though they are tiny, are big business. Each year 6 billion of them are produced, and their sales exceed $6,000,000. The wire used in making the clips would gird the earth 16 times. Nobody seems to know just when this gadget was invented. There is evidence that paper clips existed 300 years ago in Germany and perhaps as far back as the Sung Dynasty of China, which flourished from 960 to 1279 A. D. Although the date of the invention is uncertain, most people agree on one fact—the lowly paper clip keeps today's world of business and government from falling apart.

Foreign agriculturists numbering more than 21,000 have come to the United States during the past 10 years. They have studied in American colleges and laboratories and have examined American farming methods.

American Observer: Published weekly throughout the year (except during the Thanksgiving, Christmas, and Easter holidays, and four issues from the middle of August to the first week in September) by Civic Education Service, Inc., 1733 K Street, N. W., Washington 6, D. C. Subscription price, single copy $2 a calendar year. In clubs of five or more for class use, $1.20 a school year or 60 cents a semester. For a term shorter than a semester the price is 3½ cents a week. Entered as second-class matter September 15, 1931, at the post office at Washington, D. C., under the Act of March 3, 1879. Editorial Board: Jack Allen, John H. Haefner, Merrill F. Hartshorn, Erling M. Hunt, Emlyn Jones, Allen Y. King, Harold G. Moulton, David S. Muzzey, I. James Quillen. Walter E. Myer, *Founder*. *Business Manager*, Ruth G. Myer; *Managing Editor*, Clay Coss; *Executive Editor*, J. Hubert Anderson; *Associate Editors*, Anton A. Berle, Marvil Collins, Anita M. Dasbach, Hazel L. Eldridge, Margaret Ellis, Thomas F. Hawkins, Alice Haywood, Mary M. Hill, Barbara Hurlbutt, Thomas K. Myer, Ann K. Richardson, Ernest F. Seegers, Howard O. Sweet, John W. Tottle, Jr.; *Editor of Civic Leader*, William J. Shorrock; *Illustrator*, Julian Caraballo; *Art Editor*, Kermit Johnson; *Associate Artist*, Joan C. Alden.



BUREAU OF RECLAMATION

SUCH DAMS AS the Columbia River's Grand Coulee, above, play a major part in the conservation of water. Erection of dams creates reservoirs where water can be stored for later use in irrigation or in generating electric power.

Of Water Needs

(Continued from page 1)

However, water is not distributed evenly over the country. While one state suffers from drought, another may be recovering from a flood. Louisiana, the wettest state, gets six times as much rain as Nevada, the driest state.

There is another reason for the water problem. We are using far more water than we did years ago—six times as much as in 1900.

In times past, there were fewer people and fewer water-consuming gadgets—washing machines, lawn sprinklers, air conditioners, bathtubs, showers, and swimming pools. Only a few thousand acres of farm land were irrigated. Our nation had a small number of factories.

We now use 275 billion gallons of water every day—enough to float all the merchant ships of the world. This is a daily average of around 1,500 gallons for every man, woman, and child in our country.

Industry is the biggest user of water. Factories and power plants take nearly half of our daily supply.

Irrigation is the second biggest user. There are over 30,000,000 acres of farm land under irrigation. Ten thousand gallons of water are needed to grow a bushel of corn. It takes 200,000 gallons to grow a ton of alfalfa. In all, irrigation uses about one-third of our water.

We haven't seen the end of these growing needs. By 1975, experts tell us, we will require 453 billion gallons of water a day—more than half again as much as we use now.

America's water problem has no simple, easy answer. Fortunately, water is a renewable resource. Nature is constantly renewing supplies of water so we can use it again and again.

Much of our water comes from the ocean. Warmed by the sun, the air soaks up ocean water. We can't see the water vapor in the air, but it is there.

Warm air rises. When it gets high enough, it is chilled. The cold causes the water to draw together in billions of tiny droplets. Then we can see water in the air—in the form of clouds.

When clouds are chilled enough, rain or snow falls. The rain either runs into streams and rivers or soaks into the ground. Water is forever going up and coming down to earth again.

As we have seen, some of the water which falls to earth evaporates. Some flows into streams and rivers. We call that the run-off. Some water goes into the ground and sinks to a level called the water table. At this level, the ground is permanently wet.

While water is never really lost, water supplies may be damaged. A stream can be polluted by waste materials.

Pollution happens in two ways: (1) Streams are damaged by silt—the soil which is carried into rivers by moving water. This movement of soil—called erosion—robs the land of fertility and causes streams to be brown and muddy. Some of the soil-carrying streams deposit their silt in reserviors. Thus both our streams and reservoirs are harmed by erosion.

(2) Everything that goes down the drains of a big city spoils rivers. Acids, chemicals, oils and greases from factories, and dirty water from sinks and drains pollute streams.

Experts say we must control pollution if we are to preserve our supplies of usable water. Many areas are pitching in to do the job, but more cities and states need to do so.

About 12 years ago, Pennsylvania launched a program to clean up the Schuylkill River. The stream was so dirty that people made jokes about it. They said the river was too thick for sailing, too thin for farming land.

The job of cleaning the river took money—lots of it. The city of Philadelphia alone spent $80,000,000. Cities along the banks had to put in new sewage plants and other equipment.

The work paid off. Today the Schuylkill River is fit for use again. People are swimming and boating there.

Farmers and foresters have an important role to play in keeping streams clean. Their job is to prevent erosion. They do this by keeping slopes covered with trees and grass so that rain soaks into the ground instead of carrying silt away into streams.

All of us can help in the job of conserving water resources. We can save water by not wasting it. Leaky faucets, for example, waste millions of gallons of water every day.

Meanwhile, scientists are studying ways to get water where and when we want it. Years ago, Indian tribes held rain dances which were supposed to bring an end to a drought. Today, we have a surer way of influencing nature. By seeding clouds with chemicals, scientists have been able to produce rain.

Scientists are also studying ways to get the salt out of ocean water. This may be our best hope for the future.

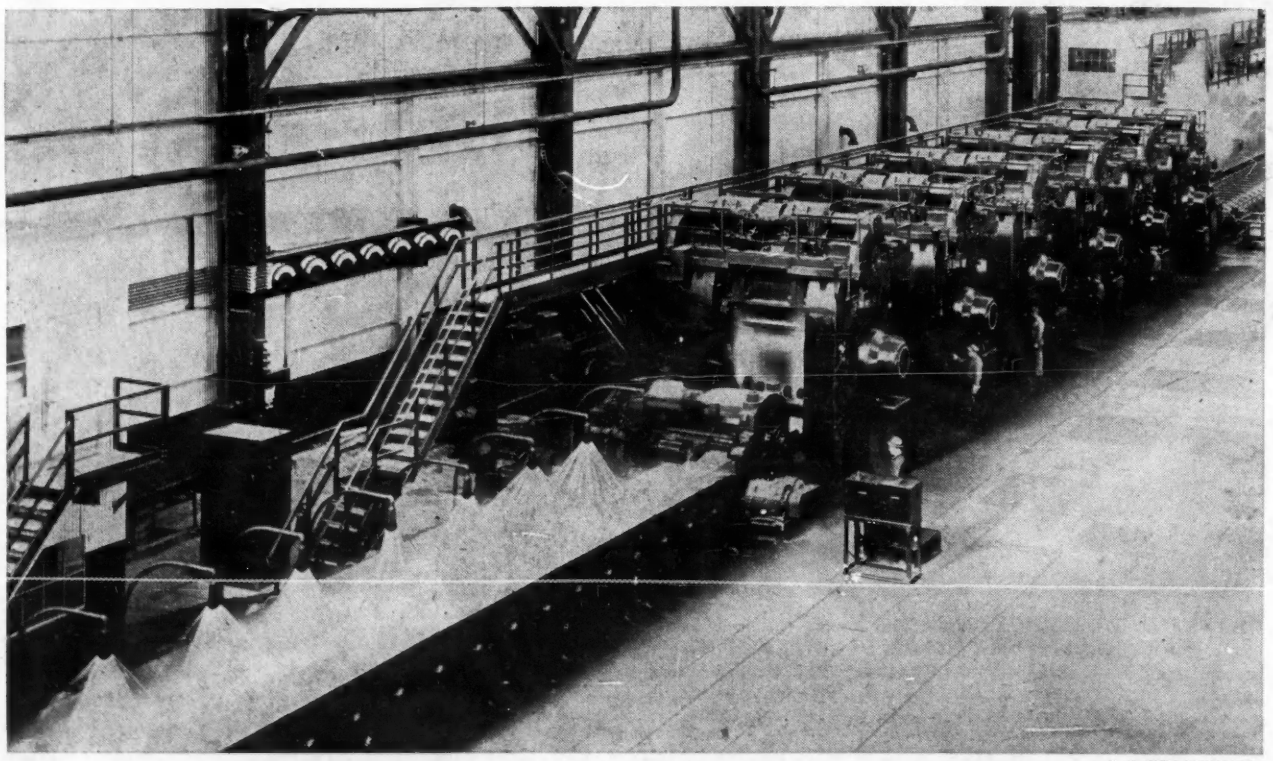
People have known how to make salt water fresh for many years. Ships at sea do it all the time. The trouble is the process is too expensive to make it practical in other places.

This may not always be the case. The Pacific Gas and Electric Company has spent $44,000,000 on a new plant which refines 144,000 gallons of fresh water from the sea every day. The company found this was less costly than digging wells or building dams.

Scientists have also learned how to put a chemical shield over the surface of a reservoir. The chemical does not affect the taste of the water or hurt fish. But it does slow evaporation, and therefore preserves water.

The United States is not the only country which faces a shortage of water. Around the world, other lands are having the same difficulty. The problem is so serious that the United Nations is studying it.

—*By* HAZEL L. ELDRIDGE



U. S. STEEL CORPORATION

INDUSTRY is our biggest user of water. Factories and power plants take nearly half of our daily water supply. More than 65,000 gallons of water, for example, cool each new ton of steel manufactured in the United States.

SMITHSONIAN INSTITUTION

A DRAWING of the new Museum of History and Technology, to be added to Washington, D. C.'s, Smithsonian Institution.

New Museum Planned for Our Capital

Smithsonian Institution Is to Build a Modern Headquarters For Its Exhibits of Industrial, Scientific Progress

WASHINGTON'S famous Smithsonian Institution is to have a new home for its Museum of History and Technology (see photo above). The building will be placed on a section of the Mall, the broad, grassy park that stretches from the nation's Capitol to the Lincoln Memorial.

The impressive new structure will replace a group of unsightly buildings, many of them really shacks, which the government has used for a number of years as offices for some of its growing agencies. The agencies are being moved to newer quarters.

Exhibits in the museum will emphasize the cultural, industrial, and scientific development of our nation. The displays will undertake to portray our heritage of freedom and our way of life.

The forthcoming addition to the Mall will be the sixth building to join the Smithsonian Institution group there. Those already in existence constitute a tourist attraction probably second only to the Capitol and White House in popularity. About 7,000,000 visitors each year are enchanted by contents of the national museums.

Background. In 1829, James Smithson, an English scientist, died and bequeathed his estate to the United States of America "to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men".

Gift Accepted

The funds reached the United States in 1838. Congress debated off and on for 8 years whether to accept the gift and put itself in the unusual position of trustee of a private individual's estate. In 1846 it was decided to take the funds and create the Institution.

The money, half a million dollars, was a large sum in those days. It was sufficient to start the Institution. However, as time has passed, the work has grown more extensive and created need for more funds.

The government has placed bureaus, which require federal funds for support, under the Smithsonian's care. The original endowment has been increased by gifts from public-spirited individuals. Visitors to Washington will find a day spent in walking through the Institution's various museums a rewarding experience. Here is what you may encounter on a tour:

In the Smithsonian Building. The red-stone structure with castle-like towers, is oldest of the museum group. It was erected in 1852 and now houses the offices of the editorial and research divisions of the Institution. It is also the burial place of James Smithson, the founder. There is a graphic arts display which traces man's development of printing.

Arts and Industries Building. On the left of the Smithsonian Building is one of the most popular museums. The Arts and Industries Building is filled with many symbols of times past. Americans are there in throngs to view collections of dramatic symbols of our history. Many strangers to our way of life are there, too, to grasp an idea of our country and its accomplishments.

Suspended from the ceiling at the entrance of the building is the "Kitty Hawk", the Wright brothers' airplane, which made its first successful flight in 1903. You may also see the "Spirit of St. Louis". In this plane Charles Lindbergh made the first solo-nonstop flight from New York to Paris, May 20-21, 1927.

In the building's Hall of History are mementos of many famous Americans. There are some precious relics of Generals Washington, Grant, Sheridan, Sherman and Pershing.

A main point of interest is the United States flag which waved defiance over Fort McHenry, near Baltimore, when the fort was attacked by the British in 1814. On that occasion Francis Scott Key was inspired to write the "Star Spangled Banner".

One of the best-liked displays is the Costume Hall. "Store-window" models representing the first ladies of the White House from Martha Washington to Mamie Eisenhower are dressed in gowns which the ladies themselves wore. The hall has just been redecorated, and the figures are now grouped in surroundings which resemble the White House parlors of their day.

A myriad of accomplishments are remembered, and it is, of course, impossible to mention them all here. Most impressive is a reproduction of the dingy old shop where, late at night, Isaac Singer successfully sewed his first stitch on his sewing machine.

Natural History Museum. Across the Mall from the Smithsonian Building is the Natural History Museum. Its exhibits deal with animals and plants, and with the earth and its peoples. In the Mammal Hall are stuffed animals from all parts of the world. There are moose, deer, wolves and seals. Many of the animals from Africa were collected by Theodore Roosevelt who went on a safari for the Smithsonian shortly after leaving Presidential office.

Animal Display

The Hall of Marine Animals displays a 78-foot model of a whale. The Mineral Hall has an excellent collection of precious gems. Realistic, life-sized figures of Indians and Eskimos illustrate the clothing and customs of these people in one series of displays.

National Gallery of Art. It is the newest of Smithsonian structures, was a gift to the nation by Andrew Mellon, one-time Secretary of the Treasury. It was opened to the public in 1941.

The gallery contains Mr. Mellon's own collection of masterpieces, plus paintings, sculpture and other works of art from various art lovers. The building itself is a beautiful and dignified setting for the treasures it contains.

Freer Gallery of Art. Built in 1919, the Freer Gallery was the gift of Charles Freer to the Smithsonian Institution. It houses what is said to be the finest Oriental art collection in the Western Hemisphere. Besides the Oriental collection is Mr. Freer's own assemblage of the paintings of James Abbott McNeill Whistler, the American artist. It is the largest single grouping of his works.

The Smithsonian Institution founded and now directs the National Zoological Park. It is located 3 miles from the Mall in Washington's Rock Creek Park.

The Institution is not simply the collector of interesting objects. On the staff are many experts in varied fields who do research and record outstanding progress in science and discovery. The results of their work are made available in a steady flow of publications.

If you would like to see a film made by the Smithsonian which tells, in words and pictures, about the work done there, write to the Smithsonian and request the film strip "Let's Visit the Smithsonian".

—*By* ANN RICHARDSON

Index

(Concluded from page 8)

American Observer Index

Volume 27, Numbers 1-44: September 9, 1957, through August 4, 1958

National News

World Affairs

(Concluded on page 7)